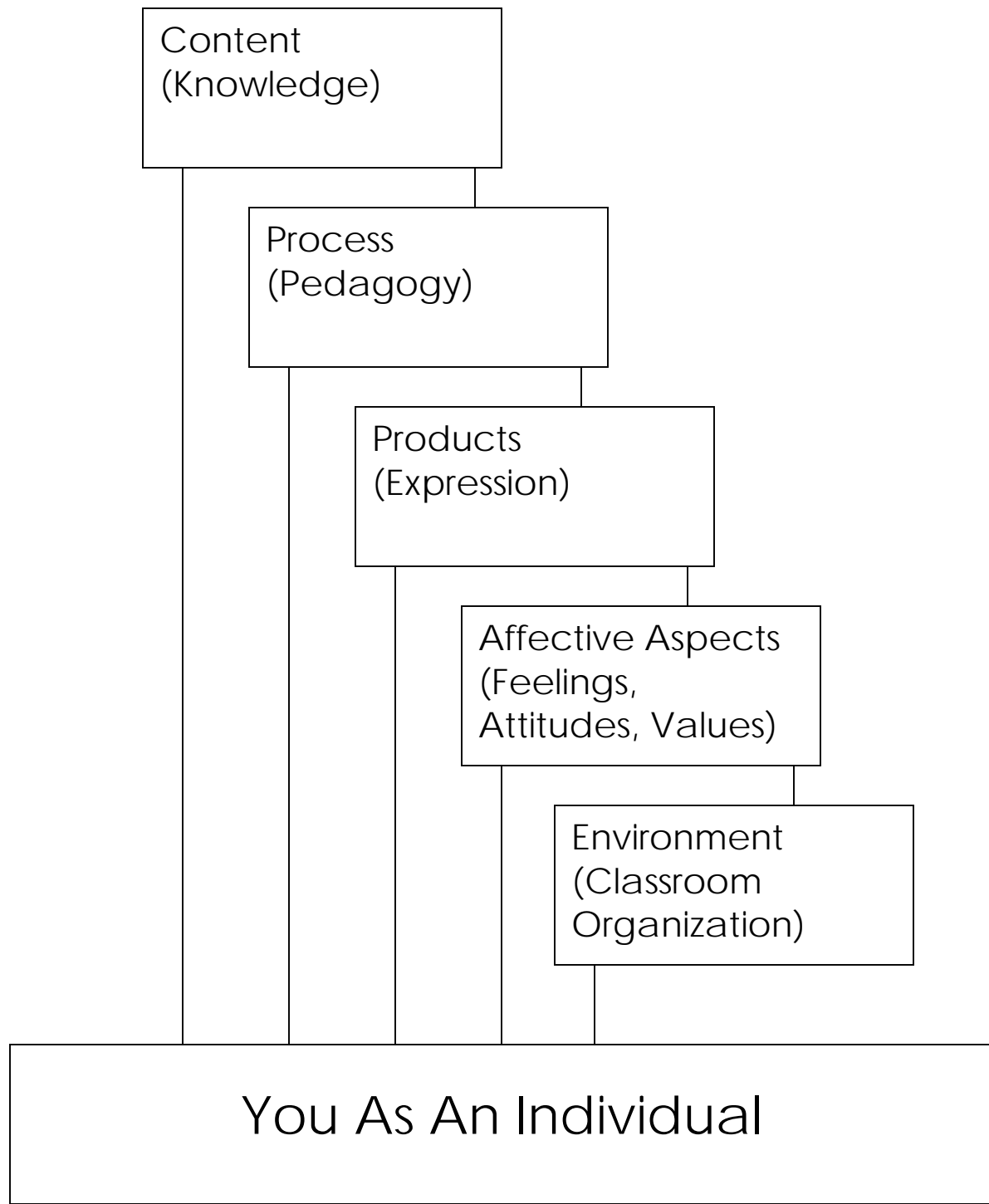


Six Dimensions of Differentiation



Content Differentiation

Goal: to increase depth of material addressed in the curriculum

Strategies:

1. Teach about the structure of the discipline
2. Teach the basic principles, functional concepts, and vocabulary of the discipline
3. Teach the methodology and problem resolution techniques of the discipline
4. Increase quantity of information about specific topics within the discipline
5. Escalate the level of probing and open-ended questions related to topics

Examples of Content Differentiation

Theme	Basic	Differentiated
Abstractness	Describe whether or not we are doing a good job in choosing a president	Accepting that "great men make history," analyze the implications this statement has for our choice of president
Complexity	List the natural resources in the United States	Show how one's use of natural resources reflects one's values and technological level.
Variety	Study the parts of the body	Compare characteristics of different species and create replacement parts
Organization and Economy	Restate the supply and demand concept	Evaluate the statement: "Supply and demand for certain products leads to wage and standard of living differences for some workers, thus creating levels of social class."
Study of People	Read and summarize some important facts about the life of Thomas Jefferson	Analyze the personal characteristics and leadership style of Thomas Jefferson and what effect they had on his major accomplishments.
Methods of Inquiry	List the components of Albert Einstein's Theory of Relativity	Keeping in mind the basic concept of Einstein's Theory of Relativity, assess what advances in science today would not be possible without it.

Process Differentiation

Goal: To broaden the repertoire of instruction to capture student interest

Strategies:

Drill and recitation

Programmed instruction

Computer-assisted instruction

Lecture

Discussion

Lecture and discussion

Peer tutoring

Problem-based learning

Socratic inquiry

Guided independent study

Unguided independent study

Simulation

Dramatization

Role playing

Examples of Process Differentiation

Theme	Basic	Differentiated
Higher-level thought	Categorize the following musicians and the type of music they perform: Gwen Stefani, Nelly, Ella Fitzgerald, Mick Jagger	Study the music and lyrics of the following musicians and evaluate what they tell about the musician's life and our modern culture: Gwen Stefani, Nelly, Ella Fitzgerald, Mick Jagger
Open-Endedness	Do you think excessive TV watching has an effect on children's behavior?	What effect do you feel excessive TV watching has had on children's behavior?
Discovery	Perform the indicated experiment and be able to tell whether sunlight has a positive or negative effect on plant growth.	Design an experiment that will prove or disprove your hypothesis about what factors influence plant growth.
Proof/Reasoning	Why do you think that is the answer?	What reasons do you have for thinking that? What evidence can you find to support your opinion?
Freedom of Choice	Teacher chooses options for students	Learner controls choices; teacher is a facilitator, providing materials and resources

*Also include a variety of grouping options, teaching methods, and pace of instruction.

Product Differentiation

Goal: To enhance students' cognitive development and expand their styles of expression

Strategies:

1. Assessment of expression styles
2. Exposure to a variety of product formats and styles
3. Direct training in modes of expression
4. Application of preferred expression style(s) to both assigned and self-selected projects
5. Learning how to create rubrics for external (teacher) evaluation and internal (self) evaluation

Examples of Product Differentiation

Theme	Basic	Differentiated
Real Problems	Teacher identifies the problem to be solved by the class	Individual students identify problems in their community, such as the wasting of food in the school cafeteria. Students work over time implementing their own solution to the problem
Real Audiences	Teacher leads the decision making	Students decide on the audience: students, principal, cafeteria workers, Superintendent
Evaluation	Teacher provides assessment instrument and does most of the evaluation	Students design assessment instruments. Assessment by teacher and student using pre-established criteria. Self-evaluation by student. Assessment by the real audience
Transformation	Everything in classroom seen from same point-of-view (that of predominant culture)	Elements of transformation: viewing from a different perspective, reinterpreting, elaborating, extending, combining

Affective Differentiation

Goal: To teach that attitudes, appreciation, and values are an integral part of curricula

Strategies:

1. Teaching for understanding how self fits into society
2. Enhancing appreciation for traits and needs associated with giftedness
3. Learning how and when to exercise roles of leadership and followership
4. Dealing appropriately with moral dilemmas
5. Comprehending skills of empathy and sympathy

Examples of Affective Differentiation

Theme	Basic	Differentiated
Self	Teacher assigns students' roles when working in groups	Students are allowed to choose roles in class that let them to play to their strengths
Appreciation	Identify social stereotypes (i.e. jock, nerd, etc.) and list characteristics associated with them	Determine which characteristics you have from each social stereotype (i.e. jock, nerd, etc.) and rank your attributes from most to least favorite
Leadership	Compare and contrast examples of good and bad leaders throughout history	Defend a decision you made about being a leader or follower in a certain situation and describe how that experience changed you
Morality	List 10 of your core beliefs	Take an example from history or literature of someone who faced a moral dilemma and judge that person's subsequent actions
Empathy	Classify the character's actions in the novel as being either empathetic or sympathetic	Imagine what happens to the characters after the novel is over and write an epilogue from the main character's point of view.

Learning Environment Differentiation

Goal: To teach that our environment can have an impact on how well we learn

Strategies:

1. Experimenting with arrangement of desks or tables and lighting
2. Understanding what background noises there are and how those may impact the noise level in the room
3. Examining the decorations in the classroom and possible distractions caused by them
4. Creating a friendly, inviting classroom where students feel safe to take risks and express themselves

Examples of Learning Environment Differentiation

Themes	Basic	Differentiated
Student Centered	High portion of class time spent on teacher's informing or lecturing	High portion of class time spent on discussion in which the students do most of the talking
Encourages Independence	Little tolerance or encouragement for student choices	Student's choice on what to learn, how to learn, and how to evaluate Classroom management Social Interaction Planning of class activities
Openness	Restrictions on topics, materials and products to be developed	Permits new ideas Exploratory discussions Freedom to change direction or procedures to meet different situations Focus on divergence
Acceptance	Tendency to evaluate student ideas on basis of teacher's standards and values	Keep thing open and fluid Listen actively to students Defer judgment until all data is collected
Physical environment	Tables Chairs Desks Books	Variety of reference books, maps, periodicals Tables for work areas Comfortable seating for discussions, seminars Study carrels for specialized equipment Calculators, computers, video equipment, Learning Centers
Mobility	Conduct all work in the classroom	Study with a mentor or scholar in other room or outside school building